

SENNHEISER

# best-seller

# 4

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Tx 0023/421 608



# HD 414 X

Enjoyed by Millions. The Most Successful Headphones in the World.

HD 414 X .....  
HD 414 X-13 .....  
HD 414 X-17 .....

Unlikely as it seems, our engineers came up with two improvements over the already outstanding HD 414: An even extended and smoother frequency response and a serration of the headband, locking the drivers in the most comfortable position. Widely acclaimed by professionals and audiophiles alike, the HD 414 X gives music its true beauty.

Frequency response: ... 20 ... 20 000 Hz  
Impedance: ... 2000  $\Omega$   
Nominal SPL (DIN 45 580): ... 94 dB  
Weight without cable: ... 125 g  
Cable length: ... 3 m

# HD 400

True Sennheiser Headphone Sound for Young People. Combining Top Quality with Economy.

HD 400 .....  
HD 400-13 .....  
HD 400-17 .....

This stereo headphone, HD 400, though moderate in price, represents genuine Sennheiser quality. Faithful reproduction throughout the entire audio range, with special attention to natural bass response. New modern styling, featherweight but rugged. Belonging to the "Open-Air" family of headphones, the HD 400 is suitable for playback of dummy head stereo recordings.

Frequency response: ... 20 ... 18 000 Hz  
Impedance: ... 600  $\Omega$   
Nominal SPL (DIN 45 580): ... 90 dB  
Weight: ... 80 g without cable  
Cable length: ... 3 m



# HD 224 X

**HiFi Stereo Headphones with Sealing Ear Pads. Light Weight but Rugged.**



HD 224 X .....   
 HD 224 X-13 .....   
 HD 224 X-17 .....

The HD 224 X features exceptionally good sound reproduction, a wide frequency range with natural bass and brilliant highs. The soft ear pads enclose the ears gently with their new double-walled air cushion design virtually ensuring soundproof listening. The driver elements are adjustable and lock into serrations of the headband. The HD 224 X is the favorite choice of the professional for monitoring and all critical listening. Available with the usual plug configurations.

Frequency response: ... 16 ... 20 000 Hz  
 Impedance: ... 200  $\Omega$   
 Nominal SPL (DIN 45 580): ... 94 dB  
 Weight without cable: ... 252 g  
 Cable length: ... 3 m

# HZA 414 HZA 414-1

**Three or Six Headphones from one Sound Source. The Headphone Junction Box that Serves the Whole Family.**





Concerts over headphones for the entire family and guests. HZA 414 for headphones with Standard loudspeaker plugs. This junction box is suitable for three sets of headphones, it can be connected directly to the loudspeaker output of your stereo unit. HZA 414-1 for headphones with five-pin Standard plug DIN 45 327. Suitable for six sets of headphones. Simply connect the junction box to your stereo unit: Connect the cable plugs of the junction box HZA 414 or HZA 414-1 to the output sockets of the stereo set. Then connect the plugs of the loudspeaker units to the cable plug sockets at the stereo unit. It is now possible to use the loudspeakers and the headphones together or separately.



# HD 4004

**The Family Headphones for all Purposes.  
Suited for all Monaural Sources.**



HD 4004 .....   
HD 4004-17 ..... 

For tape recorders, cassette recorders, record players, radios and TV sets. The HD 4004 clearly transmits the sounds from all these units. It is the headphone for everyone. Mother watching the family quiz – Father enjoying the sports show and the kids listening to their favorite records. The headphone volume can be adjusted separately. The connecting cable of the HD 4004 is 7.5 m long so that you can make yourself comfortable in any location.

Frequency response: ... 100 ... 6000 Hz  
Impedance: ... 17  $\Omega$   
Nominal SPL (DIN 45 580): ... 94 dB  
Weight: ... 16 g without cable  
Cable Length: ... 7.5 m

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# HD 44

**The Stereo Headphone without Headband.  
A new Listening Concept. The Lightest  
Stereo Headphone in the World.**



HD 44 .....   
HD 44-13 .....   
HD 44-17 ..... 

A stereo headphone especially suitable for ladies: chic, attractive – does not interfere with the hairdo – light enough to forget about. A headphone for the young: full of pep for pop. Plug it into all stereo units, cassette recorders, tape recorders, record players and radios. It has a standard loudspeaker plug with a built-in socket so that a series of headphones can be plugged one into the other for family listening. Also available with phone plug.

Frequency response: ... 40 ... 15 000 Hz  
Impedance: ... 640  $\Omega$   
Nominal SPL (DIN 45 580): ... 94 dB  
Weight: ... 33 g without cable  
Cable length: ... 3 m

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# HDI 406

Infrared TV Sound: The Latest Medium  
for Wireless Listening, the  
Stethoset-type Headphone.



The new technique:  
Wireless sound transmis-  
sion and reception in your  
living room with the HDI 406  
infrared headphone and the  
SI 406 associated transmitter.  
Light, stylish stethoset-type head-  
phone with excellent sound quality.  
Complete with volume control and  
rechargeable battery.

Frequency response: ... 100 ... 10 000 Hz  
Maximum SPL: ... 105 dB  
Carrier frequency: ... 95 kHz  
Weight: ... 65 g

# SI 406

Adaptable to TV and Radio Sets with Jacks  
for Headphones or Extra  
Speakers.



The infrared transmitter SI 406  
switches automatically on and off  
and requires no attention. A special  
version, model SI 406 S, is available  
for people with hearing difficulties.

Frequency response: ... 40 ... 15 000 Hz  
Carrier frequency: ... 95 kHz  
Dimensions: ... approx. 200 x 80 x 17 mm



# HDI 434

Wireless HiFi Sound With Infrared Light.



The newest and most comfortable way to enjoy your stereo headphones. No connecting cable to limit freedom of movement. Yet, the infrared technique does not impair the quality of your stereo program in any way. Wide frequency response, low distortion and noise. Extensive human engineering efforts have resulted in a wearing comfort permitting long listening sessions without fatigue. Despite the integration of amplifier and battery power supply, the HDI 434 is remarkably light-weight. Left and right channel are FM modulated, the carrier frequencies correspond to the new standard. A 3-position switch selects either mono-left, stereo, or mono-right. Powering by regular or rechargeable battery. The battery life exceeds 100 hours. Slide controls for volume are provided for each channel separately.

Frequency response: ... 20 ... 20 000 Hz  
Max. SPL: ... 105 dB  
Carrier frequencies: ... 95 kHz - left channel, 250 kHz - right channel  
Weight: ... 380 g  
Powering: ... 9 V transistor battery

# SI 434

Infrared Stereo Transmitter Connects Directly to HiFi Amplifiers with Headphone DIN Connector or Stereo Phone Plug.

SI 434-13 ...   
SI 434-17 ... 



Small, unobtrusive infrared stereo transmitter for wireless HiFi sound transmission to the infrared stereo headphone HDI 434. The 100 mW infrared output power can be doubled by using an infrared slave unit SZI 434. Just connect the coaxial cable of the SZI 434 to the extra input on the SI 434. The transmitter is equipped with an on/off switch and monitoring LED which also indicates modulation.

Frequency response: ... 20 ... 20 000 Hz  
Carrier frequencies: ... left channel - 95 kHz, right channel - 250 kHz  
Dimensions: ... 200 x 80 x 23 mm



# MD 402 LM

**Super Cardioid Dynamic Microphone for  
Cassette and Tape Recorders. The Reliable  
Microphone for the Home Recordist.**



Recording enthusiasts can always depend on the MD 402 LM. It is as uncomplicated and reliable as it should be. Closely controlled tolerances make a pair of MD 402 LM microphones the ideal setup for producing successful stereo tapes. Aside from its home use, the MD 402 LM has proven its value in commercial applications as well, e. g. for P. A. systems, court reporters, movie sound, etc. The super cardioid directional characteristic ensures best results in noisy surroundings.

Frequency response: ... 80 ... 12 500 Hz  
Directional characteristic: ... Super cardioid  
Impedance: ... approx. 750  $\Omega$   
Sensitivity: ... 2mV at 94 dB SPL

# MD 412 LM

**Super Cardioid Dynamic Microphone  
for Demanding  
Semi-Professional Use.**



For the advanced recordist who is becoming familiar with the multiple possibilities of tape recording and who wants to use the advantages of the MD 412 LM. The frequency response meets the requirements of HiFi standards. Practically all types of recordings can be made with the MD 412 LM. A switchable filter facilitates attenuation of the low frequencies so that there is no over-accentuation of the bass range with close-up of the microphone. The super cardioid directional characteristic ensures outstanding recordings even under difficult conditions such as noisy surroundings or rooms with bad acoustics.

Frequency response: ... 50 ... 12 500 Hz  
Directional characteristic: ... Super cardioid  
Impedance: ... approx. 800  $\Omega$   
Sensitivity: ... 2,3 mV at 94 dB SPL



# MKE

## 203

## 403

## 803



### Versatile Modular Electret Condenser Microphone System.



Three directional patterns can be selected: Omni (ME 20) super cardioid (ME 40) or shotgun (ME 80). The chosen microphone head simply screws onto the powering module K 3 N (K 3 U with XLR connector). All components can be purchased separately to make the desired combination. The powering module is supplied complete with battery and quick release clip.

Frequency response: ... 50 ... 15 000 Hz  
 Directional patterns: ... omni, super cardioid, shotgun  
 Impedance: ... approx. 200  $\Omega$   
 Sensitivity: ... 3mV, 5mV (MKE 803) at 94 dB SPL

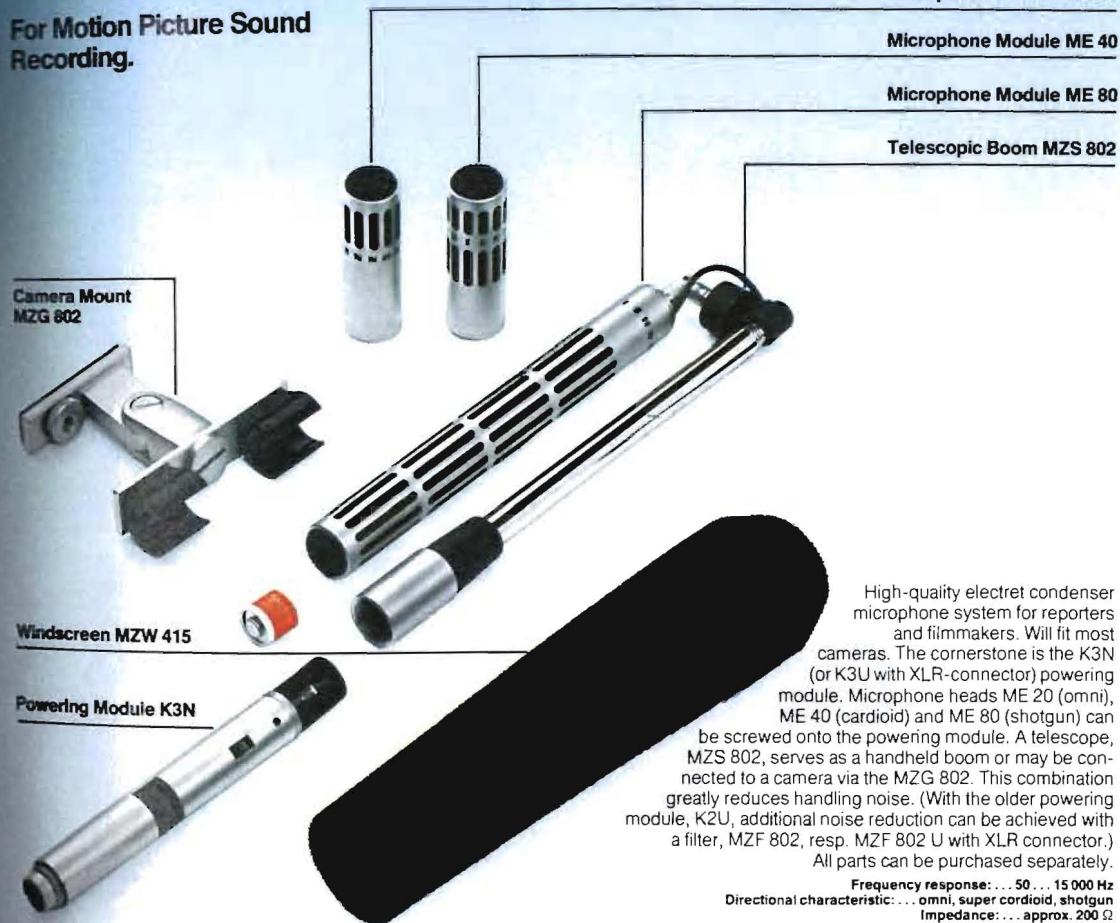
# »Telemike«

### For Motion Picture Sound Recording.

Camera Mount  
MZG 802

Windscreen MZW 415

Powering Module K3N



Microphone Module ME 20

Microphone Module ME 40

Microphone Module ME 80

Telescopic Boom MZS 802

High-quality electret condenser microphone system for reporters and filmmakers. Will fit most cameras. The cornerstone is the K3N (or K3U with XLR-connector) powering module. Microphone heads ME 20 (omni), ME 40 (cardioid) and ME 80 (shotgun) can be screwed onto the powering module. A telescope, MZS 802, serves as a handheld boom or may be connected to a camera via the MZG 802. This combination greatly reduces handling noise. (With the older powering module, K2U, additional noise reduction can be achieved with a filter, MZF 802, resp. MZF 802 U with XLR connector.) All parts can be purchased separately.

Frequency response: ... 50 ... 15 000 Hz  
 Directional characteristic: ... omni, super cardioid, shotgun  
 Impedance: ... approx. 200  $\Omega$   
 Sensitivity: ... 3mV, 5mV (ME 80) at 94 dB SPL  
 Total length of Telemike combination: ... approx. 1 m



# »Mikromike« MKE 10

**Miniature Electret Lavalier Microphone  
for Recordings  
in Studio Quality.**

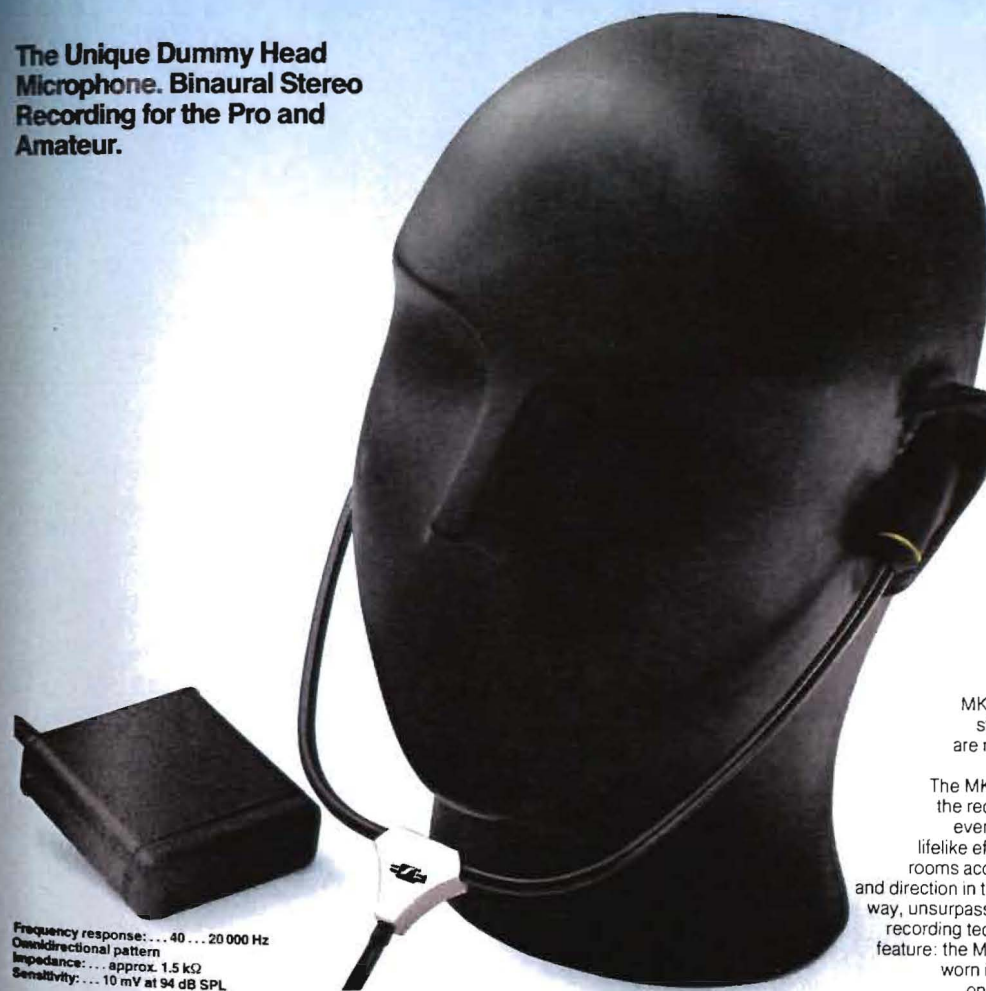


Despite its small dimensions, this microphone easily copes with the stringent requirements of the professional or the serious audiophile. It has a built-in pop filter and an extra windscreen for outdoor recordings. The durable steel cable ends in a European DIN connector and will hook up to all inputs which have a middle pin for the DC supply voltage. To facilitate interfacing, three different battery adapters are available: MZA 10 for unbalanced M inputs, MZA 10-N for balanced low impedance N inputs and MZA 10-U for balanced low impedance inputs with XLR connector.

Frequency response: ... 50 ... 20 000 Hz  
Omnidirectional pattern  
Impedance: ... approx. 1 k $\Omega$   
Sensitivity: ... 10 mV at 94 dB SPL

# MKE 2002

**The Unique Dummy Head  
Microphone. Binaural Stereo  
Recording for the Pro and  
Amateur.**



Frequency response: ... 40 ... 20 000 Hz  
Omnidirectional pattern  
Impedance: ... approx. 1.5 k $\Omega$   
Sensitivity: ... 10 mV at 94 dB SPL

With Sennheiser's MKE 2002, binaural stereo recordings are now within reach of the hobbyist. The MKE 2002 enables the recordist to tape all events with amazing lifelike effects, recreating rooms acoustics, distance and direction in the most realistic way, unsurpassed by any other recording technique. Special feature: the MKE 2002 can be worn inconspicuously on your own head.



# MD 421

**Studio Cardioid Microphone for Highest Requirements. A Studio Microphone Proven Throughout the World.**



This microphone is used all over the world by professionals and semi-professionals. The MD 421 is always chosen when a good reliable microphone for high quality recordings is needed. It is sturdy and safe to operate under all conditions. In professional audio fields it is known as the microphone without problems which can be used for all applications. Many prize-winning recordings have been achieved with the MD 421.

Frequency response: ... 30 ... 17 000 Hz  
Directional characteristic: ... cardioid  
Impedance: ... approx. 200  $\Omega$   
Sensitivity: ... 2 mV at 94 dB SPL

# MD 441

**Directional Studio Microphone for Multi-Professional Applications. The Dynamic Top Model.**



The MD 441 is an exceptionally fine microphone. Its quality and its many selectable settings make it the ideal microphone for experts and the most fastidious audiophile. It is suitable for all possible transmission techniques. The frequency response can be set in ten different ways. The "brilliance" switch increases high frequencies. The bass control has five different positions for varying the low frequencies. Because of its super cardioid directional characteristic, the MD 441 can be used under difficult conditions. A double case, where the inner shell is spring-mounted to the outer case, protects the microphone against handling noise.

Frequency response: ... 30 ... 20 000 Hz  
Directional characteristic: ... supercardioid  
Impedance: ... approx. 200  $\Omega$   
Sensitivity: ... 2 mV at 94 dB SPL



**profipower**

**Top Quality Microphone for Rock Stars.  
Rugged, Durable and Powerful.**

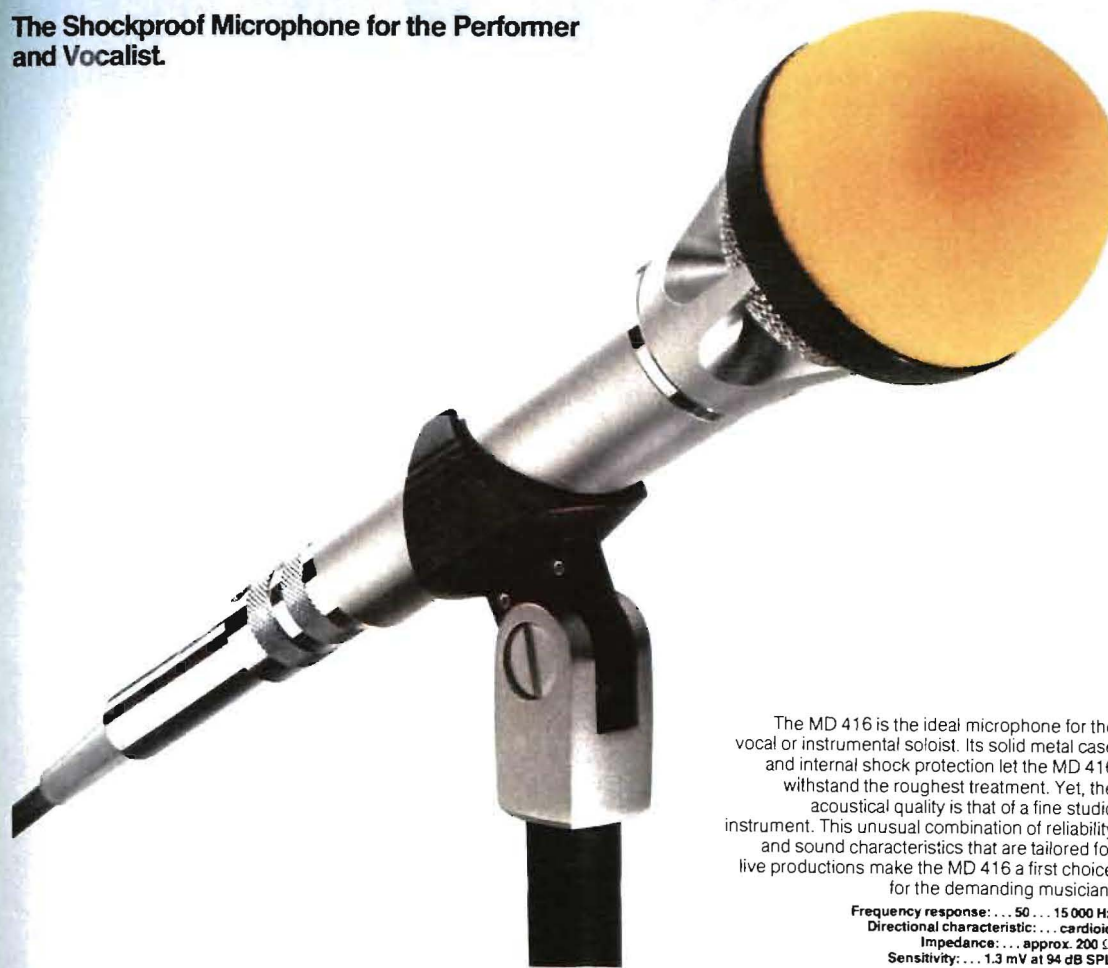


The pro calls it power - the ability for extreme high volume before feedback. Sound that projects with muscle! A frequency range that covers all instruments as well as the human voice. Built-in bass/ proximity cut-off and pop filter. Mechanically, the profipower has been designed to take road abuse. Solid metal housing with replaceable stainless steel grill screen. Double housed and shockmounted, it eliminates handling noise. Noise-free on/off switch. Included is a 15 ft. cable, XLR to phone plug.

Frequency response: ... 40 ... 16 000 Hz  
Directional characteristic: ... super cardioid  
Impedance: ... approx. 200  $\Omega$   
Sensitivity: ... 1.4 mV at 94 dB SPL

**MD 416 N**

**The Shockproof Microphone for the Performer  
and Vocalist.**



The MD 416 is the ideal microphone for the vocal or instrumental soloist. Its solid metal case and internal shock protection let the MD 416 withstand the roughest treatment. Yet, the acoustical quality is that of a fine studio instrument. This unusual combination of reliability and sound characteristics that are tailored for live productions make the MD 416 a first choice for the demanding musician.

Frequency response: ... 50 ... 15 000 Hz  
Directional characteristic: ... cardioid  
Impedance: ... approx. 200  $\Omega$   
Sensitivity: ... 1.3 mV at 94 dB SPL



# Sennheiser-Representatives

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## Overseas

### Ceylon

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44/1 Uswalle,  
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### Hongkong

Messrs.  
Jebsen & Co. Ltd.,  
P.O. Box 97,  
Hongkong,  
☎ H-225111 (30 Lines)

### India

Cornel,  
532 Sardar Vallabhbhai,  
Patel Road, Sandhurst Bridge,  
Bombay 7

### Israel

Messrs.  
Rondo,  
10. Malchei Israel Sq.,  
Tel-Aviv,  
☎ 26 67 10  
Telegr. Rondo

### Japan

General Traders Ltd.,  
Marukoshi Building,  
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Tx J 24754

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Santiago de Chile,  
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Tx 0034/40 596

TC Electronics, Ltd.,  
2 Thorncliffe,  
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Toronto, Ontario  
☎ 1-416-423-2843

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Yushin Comp. Inc.,  
P.O. Box 43,  
Yeung-Deung-Po,  
Seoul, Korea

### Lebanon

Messrs.  
Eltek,  
P.O. Box 8209, Dora  
Beirut,  
☎ 26 50 48

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4-6, Rue Canizarès,  
Boite Postale 990,  
Casablanca,  
☎ 628-61

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Mandaluyong,  
Rizal

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Tx Jebsing RS 21487

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Tx 0095/8-0174

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